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10/560,522	12/13/2005	Yoshio Harada	P28972	6373
7055 7590 10/05/2007 GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191			EXAMINER GUGLIOTTA, NICOLE T	
			ART UNIT 1709	PAPER NUMBER
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APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
10560522	12/13/2005	HARADA ET AL.	P28972

GREENBLUM & BERNSTEIN, P.L.C.
1950 ROLAND CLARKE PLACE
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Nicole T. Gugliotta

ART UNIT	PAPER
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1709

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Commissioner for Patents

Examiner adds the following prior art to the references cited:

Materials Research Bulletin
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Abstract[Add to my Quick Links](#)[Cited By](#)[E-mail Article](#)[Save as Citation Alert](#)[Export Citation](#)[Citation Feed](#)doi:10.1016/0025-5408(81)90013-1 [Cite or Link Using DOI](#)

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Properties of black Y₂O₃ sintered bodies

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Abstract

Black Y₂O₃ pieces are obtained by heating in a reducing atmosphere, and they have some properties other types of Y₂O₃ do not have. In this study, hardness, transmittance and thermoluminescence of black Y₂O₃ sintered pieces are investigated.

The Knoop hardness numbers of the black Y₂O₃ pieces vary from 615 to 804 kg/mm², and the average hardness number is 699 kg/mm², which is nearly equal to that of a colorless piece. In-line transmittances of the dark Y₂O₃ pieces in the 0.2~11 μm wavelength are lower than those of colorless pieces. The trap level of the black Y₂O₃ pieces is 1.22 eV.

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